

Appln No. 09/929,178

Amdt date June 7, 2005

Reply to Office action of March 7, 2005

Amendments to the Drawings:

The attached sheet of drawings include changes to Figure 1. This sheet, which includes Fig. 1 replaces the original sheet including Fig. 1.

Attachment: Replacement Sheet

Appln No. 09/929,178

Amdt date June 7, 2005

Reply to Office action of March 7, 2005

REMARKS/ARGUMENTS

In the Office action dated March 7, 2005, the Examiner raised objections to the drawings and claims, and rejected claims 1 - 10 under 35 U.S.C. § 103.

By this Amendment, Applicant has amended claims 4, 5 and 7, canceled claims 11 - 25 and added claims 26 - 40. In addition, Applicant has corrected several typographical errors in the Specification. Applicant submits that no new matter has been added by these amendments. Reconsideration and reexamination are hereby requested for claims 1 - 10 and 26 - 40 that are now pending in this application.

Response to the Objection to the Drawings

The Examiner requested that Figure 1 be designated as prior art. Applicant has amended Figure 1 as requested.

The Examiner objected to the drawings based on the reference characters "603" and "604." Applicant has amended the specification to change reference character "603" to reference character "604" so that the specification is consistent with the drawing. Applicant submits that no new matter has been added because this amendment is supported, for example, by the original context of the specification and drawings.

Response to the Objection to the Claims

The Examiner objected to claims 4, 5 and 7 under 37 C.F.R. 1.75(a) because of various informalities. Applicant has amended the claims as set forth above to address these issues.

Appln No. 09/929,178

Amdt date June 7, 2005

Reply to Office action of March 7, 2005

Response to the § 103 Rejections of Claim 1 - 10

The Examiner rejected claims 1 - 10 under 35 U.S.C. § 103(a) as being unpatentable over Gressel et al., U.S. Patent No. 6,360,321 (hereafter referred to as "Gressel"), in view of "The SSL Protocol Version 3.0" (hereafter referred to as the "SSL3spec"). Claim 1 is independent. Claims 2 - 10 depend on independent claim 1.

The rejection of claim 1 is based, in part, on the grounds that "it would have been obvious to one skilled in the art at the time of applicant's invention to incorporate the network security protocol of SSL3spec into the crypto chip of Gressel et al. in order to gain cryptographic security between 2 parties, interoperability between differently coded programs, and extensibility to other protocols and methods."

Applicant traverses the rejection of claim 1 because at the time the invention was made there was no motivation in the art to combine the two references. For example, it was not obvious to one skilled in the art at the time the invention was made to pass non-pre-padded network security protocol data between the chip and the source in a simple pass. As Applicant explains at page three of its specification, conventional systems used multiple passes to process non-pre-padded network security protocol data:

Other network security protocol packets, such as SSL and TLS packets, however, are not pre-padded, and are therefore not amenable to the same parallel processing hardware implementations as IPsec data. According to such implementations, two passes across the PCI bus (i.e., one

Appln No. 09/929,178

Amdt date June 7, 2005

Reply to Office action of March 7, 2005

pass in and out for each of the authentication and encryption/decryption operations) would be required.

This issue is explained in more detail at page 9 of Applicant's specification:

The format of SSL data is represented (outbound direction) in FIG. 2 with "x" indicating that an operation (authentication or encryption) is required on that portion of the SSL packet. SSL encryption requires computation of a message authentication code ("MAC"). As indicated by the arrow, computation of the MAC requires as input the Content Type, Length and Data portions of the SSL packet (as noted above, TLS uses an HMAC in which the Version is included in the computation; other aspects of the authentication and encryption of TLS data are similar to SSL as it relates to the present invention). Therefore, as noted above, conventional implementations use two passes across the PCI bus to crypto process SSL data, one for authentication and one for encryption.

Neither of the cited references teaches nor suggests that anything less than multiple passes could be used to process non-pre-padded network security protocol data. Accordingly, assuming there was any motivation to combine the references (and Applicant maintains there was none), the combination would only provide a multiple-pass system as was known in the art.

In contrast, the invention of claim 1 specifically provides a method where "said non-pre-padded network security protocol

Appln No. 09/929,178

Amdt date June 7, 2005

Reply to Office action of March 7, 2005

data is passed between said chip and said source in a single pass." In view of the above, Applicant respectfully submits that independent claim 1 is not obvious in view of the cited references.

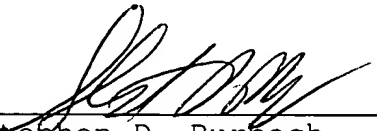
Claims 2 - 10 that depend on claim 1 also are patentable over the cited references for the reasons set forth above. In addition, these dependent claims are patentable over these references for the additional limitations that these claims contain.

New independent claim 26 also recites, in part: "the non-pre-padded network security protocol data is passed between the chip and the source in a single pass." For reasons similar to those set forth above, Applicant submits that claim 26 and claims 27 - 40 that depend on claim 26 are patentable over the references of record.

CONCLUSION

For the foregoing reasons Applicant submits that the claims are patentable over the references of record. Reexamination and reconsideration are respectfully requested.

Respectfully submitted,
CHRISTIE, PARKER & HALE, LLP

By 
Stephen D. Burbach
Reg. No. 40,285
626/795-9900

SDB/vsj
SDB PAS614123.1-*--06/7/05 7:28 PM